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# GENERAL DEVELOPMENT AND INTEGRATION OF METHODOLOGICAL WORK, INCLUDING DEVELOPMENT INDICATORS: GENERAL DEVELOPMENT AND INTEGRATION OF METHODOLOGICAL WORK

## Joint report of the Secretary-General of the United Nations and the General Agreement on Tariffs and Trade

SUMMARY

The present report presents the views of the Secretary-General and of the General Agreement on Tariffs and Trade (GATT) on the future relationship between the Standard International Trade Classification (SITC) and the Harmonized Commodity Description and Coding System (HS). Areas of agreement and disagreement are identified and summarized (paras. 4-7). Points for discussion are listed (para. 8). The views of each organization are presented in detail: those of the Secretary-General, in paragraphs 9-28 and those of GATT in paragraphs 29-87.

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## INTRODUCTION AND COMPARISON OF VIEWS

1. At its fourteerth session (Geneva, 17-20 September 1991), the Statistical Commission's Working Group on International Statistical Programmes and Coordination requested the Statistical Division of the Department of Economic and Social Development of the United Nations Secretariat and the General Agreement on Tariffs and Trade (GATT) to prepare jointly a report for the Statistical Commission on the future relationship between the Standard International Trade Classification (SITC) and the Harmonized Commodity Description and Coding System (HS) (see document E/CN.3/1993/2, para. 7). The present report fulfils that request.

2. The two organizations adopted different approaches to the issue. The Statistical Division of the Department of Economic and Social Development of the United Nations Secretariat adopted a broad approach (paras. 8-28 below) and GATT a more detailed one (paras. 29-87 below).

3. In terms of conclusions, there were some agreements and some disagreements between the organizations. These are summarized below.

### A. Agreements

4. Countries should, as far as possible, adopt the HS for compilation of their international trade statistics. However, in order not to place excessive and untimely burdens on countries, a change to the HS could be implemented at that time in the future when a country would in any case be revising its national classification (see para. 15 and paras. 60 and 69). Some conditions are attached to this position (see para. 16).

5. Statisticians should be more active in the review of the HS and the Customs Cooperation Council (CCC) should be encouraged to take fully into account the statistical implications of any change in the HS, particularly with respect to the need to maintain continuity of statistical series and to take account of the capacities of countries, particularly developing countries, to implement and revise detailed classifications for national use (paras. 16 and 81).

### B. Disagreements

6. The United Nations sees a continuing role at the country level for the Standard International Trade Classification, Revision 3 (SITC, Rev.3), as an analytical classification that is used extensively. The United Nations recommends revising the SITC, Rev.3, when the HS is revised in 1996. The revision of the SITC, Rev.3, would reflect the new details from the revised HS plus any structural changes that would be necessitated by structural changes in the HS. Correlation between the SITC, Rev.3, and the HS would be maintained at the most detailed level possible. For databases maintained at

the international level, the United Nations recommends that data be available in the HS and in the various revisions of the SITC, as determined by the needs of users, with conversion from the HS to the various versions of the SITC to be carried out in such a way as to balance the technically best approach with the resources needed for each approach.

7. GATT considers that the SITC, Rev.3, should not be continued in future if the intention is to revise it in line with the HS, since maintaining it in that way will further deteriorate the existing historical continuity of the SITC time-series (unless future revisions of the HS pay more rigorous attention to maintaining the historical continuity of both the HS and the SITC). An arrangement whereby revisions of the SITC were made less frequently than those of the HS would help maintain the continuity of the existing SITC historical series. In the absence of such an arrangement, GATT favours the option of dropping the SITC, Rev.3, in future in favour of the HS, as more countries adopt the HS, and considers that:

(a) The historical series for SITC, Rev.2, and the SITC, Rev.1, should be derived directly from the HS (and not through the SITC, Rev.3) since with this procedure a lesser number of HS classes need to be prorated among two or more SITC, Rev.1 and Rev.2 groups;

(b) Economic analysis at the aggregate level could be done using the HS and the provisional Central Product Classification (CPC) and that any other aggregation needed could be developed by users from the basic HS data.

## I. POINTS FOR DISCUSSION

8. The Statistical Commission may wish to:

(a) Recommend to countries to adopt, over time, the HS for compilation and dissemination of their international trade statistics (see paras. 9-13, 15, 16, 29-35 and 37-59);

(b) Recommend to the Customs Cooperation Council to take fully into account the statistical implications of any changes proposed for the HS and the statistical needs and capacities of developing countries (see paras. 16 and 79-81);

(c) Set out the Statistical Commission's views on the desired technical relationship between the SITC and the HS, considering the options identified by the United Nations and GATT (paras. 20 and 60-87). Those options are:

(i) To make no further revisions to the SITC, R.3 (see para. 21);

(ii) To revise the SITC, R.3, but less frequently than the HS (see paras. 60-87, especially para. 87 (b));

(iii) To revise the SITC, R.3, at the most detailed level in full correlation with the HS (see paras. 22 and 25) or to revise the SITC in full correlation with the HS and consider whether additional structural changes in the SITC are necessary (see para. 24);

(iv) To revise the SITC, R.3, in full correlation with the HS but only to the three-digit level of the SITC, R.3 (see para. 23);

(v) To drop the SITC, R.3, in future in favour of the HS as more countries adopt the HS but maintain historical time-series in the SITC, R.2, and the SITC, R.1, by conversion from the HS (see paras. 60-87, especially 87 (c));

(d) Set out the Commission's views concerning the role foreseen for the Standard International Trade Classification in the light of the broad and increasing adoption of the HS for international trade statistics in countries (see paras. 14, 17-19, 37-59, 77 and 78).

## II. VIEWS OF THE SECRETARY-GENERAL

### A. The Standard International Trade Classification (SITC)

9. The Standard International Trade Classification (SITC) was introduced in 1950 when it was adopted by the Economic and Social Council on the recommendation of the Statistical Commission. 1/ It was developed, and has been revised and updated, through major international cooperative efforts. The SITC was designed to serve as a basis for national trade classifications and for international trade statistics compilation, to promote international comparability of statistics and to provide trade statistics that are useful for economic analysis of trade flows and structure and integration of external trade data into the System of National Accounts. The SITC, Rev.3, has 3,118 basic items at the most detailed level of the classification (four- and five-digit) and these collapse to aggregates at the four-, three- two-, and one-digit levels. In many countries it is used for compilation and analytical purposes and internationally for basic information on trade flows and for economic analysis. Many countries that compile their trade data according to other classifications such as the HS recompile them in terms of the SITC also. The classification is supported by a commodity indexes publication. 2/ The Statistical Division of the Department of Economic and Social Development of the United Nations Secretariat provides answers to technical questions arising from countries and users and provides limited training in the context of international and national workshops. Revision and updating work is done every 10 years or so through an international cooperative effort.

## B. The Harmonized Commodity Description and Coding System (HS)

10. The HS was introduced effective with data from 1988 when the International Convention on the Harmonized Commodity Description and Coding System, approved by the Customs Cooperation Council, entered into force. 3/ It was developed through a major international cooperative effort. It is a multi-purpose classification designed primarily for customs and trade statistics and transport statistics. It has also been accepted by the Statistical Commission and other international bodies as the basis for revision and harmonization of international economic classifications. The SITC, International Standard Industrial Classification of All Economic Activities, Third Revision (ISIC), 4/ the Provisional Central Product Classification (CPC) 5/ and the General Industrial Classification of Economic Activities within the European Communities, Revised (NACE) 6/ have been revised using the HS as building blocks. These classifications are all correlated precisely with the HS.

11. The HS has 5,019 items at the most detailed level, and these collapse to aggregates at the four- and two-digit levels. As of 31 October 1991, 64 countries had signed the HS Convention, which involves a commitment to produce trade statistics at the six-digit level of the HS. Twenty-four other countries were applying the HS or HS-based classifications without adopting the HS Convention and a total of approximately 114 countries had HS-based customs tariff nomenclature. Other countries have announced plans to adopt the HS. It is expected that in the next few years around 120 countries will be compiling their trade data on the HS. The HS comprises the list of Headings and Subheadings, General Rules for Interpretation of the System and Section and Chapter Notes including Subheading Notes. 3/ The HS is well supported by a permanent technical committee of representatives from each of the contracting parties that meets twice annually. The publications Explanatory Notes and Amending Supplements, Alphabetical Index to the Harmonized System and the Explanatory Notes and a Compendium of Harmonized System Classification Opinions 7/ have been issued to help standardize classification decisions across countries. In addition, there is a secretariat group of technicians from many industrial fields to support the classification and a detailed commodity database is in preparation. Assistance is given to contracting parties for implementation of the classification. Training workshops are provided at the national and international levels and training modules on the HS have been prepared for training purposes. Revision/application is kept under continuous review by the technical committee.

12. The HS is presently under revision with the revision to be effective 1 January 1996. On 30 April 1992, CCC reported that the first series of the substantial review of the Harmonized System had been going on since 1989. The original target had been to complete the review work by early 1993 so that the recommendation to amend the HS Convention could be approved by the Customs Cooperation Council at its June 1993 session. Such amendments would then be implemented on 1 January 1996, if no Contracting Parties notified objections.

The HS Review Subcommittee had already held seven 2-week sessions and examined chapters 25-40 and 50-90. The Subcommittee would have to examine at another two sessions chapters 1-24, 41-49 and 91-97, as well as all pending questions already examined at previous sessions, if the original target was to be met. It would also examine possible deletion of a number of subheadings in the light of trade statistics. In the circumstances, it seemed still somewhat premature to outline the content and the magnitude of the forthcoming amendments to the Harmonized System. However, some important amendments had so far been adopted by the Harmonized System Committee. It was hoped that the situation would become clearer at the end of the tenth session of the Harmonized System Committee in October 1992.

13. The SITC, Rev.3, is directly correlated with the HS. The expectations are that the correlation will be maintained. At its twenty-sixth session, the Statistical Commission expressed the consideration that it was important to maintain the correlation, although it recognized that too-frequent changes in statistical classifications were not desirable. 8/ Growth in the national use of the HS for compilation of trade statistics, its underlying role in such other classifications as the ISIC and the CPC as a basis of harmonization of classifications, and its pending revision create a need to review the appropriate future relationship between both the HS and the SITC and the role of the SITC.

## C. Application of classifications

14. When considering application of the two classifications the distinction needs to be drawn between a classification's use for primary compilation purposes at the national level and its use for economic analytical purposes based on a recompilation of data from the original compilation classification. The distinction also needs to be made between use at the national level and use in databases at the international level.

### 1. At the national level

#### (a) Considerations related to recommending HS for primary compilation purposes

15. For the reasons set out in paragraphs 10-12 above covering the extent and growth of national use of the HS, the ongoing technical support for this classification and the desirability of removing over time the competition and duplication between the HS and the SITC for primary compilation purposes at the national level, the Statistical Commission may wish to consider recommending to countries the use of the HS for primary compilation of trade statistics. In order not to place excessive and untimely burdens on countries, especially those that may have adopted the SITC, Rev.3, in the last several years or may be planning to do so, such a recommendation could be implemented at that time in the future when a country would in any case be revising its national classification. Thus countries using the SITC or any

other classification would continue to use that classification during a transition period, until they chose to change for reasons related to their own needs. Adoption of the HS will provide countries with a more detailed classification - a classification that will be in use in a large majority of countries and one that is strongly supported on an ongoing basis by significant technical work, a large and representative intergovernmental body, a technically strong secretariat, and tools and assistance slated for countries for implementation purposes. In the long run, this will also improve international comparability of current commodity trade data.

16. Some conditions should be attached to this recommendation, including one specifying that CCC should take more fully into account statistical considerations in its ongoing work on the HS to meet statistical needs especially of continuity of time-series over time and of analysis of development of industries. This is of particular concern given the central role of the HS in harmonization of international economic/statistical classifications such as the SITC, CPC, ISIC and NACE. Also the needs of developing countries and their capacities to implement the classification need to be taken fully into account.

(b) Continuing importance of the SITC as an analytical classification at the national level

17. In addition to its continuing role as a primary compilation classification during a transition period, the SITC would continue to have a major role in international trade statistics as an analytical classification and as a classification for long-term time-series. Needs of users are varied and complex: needs exist for data in terms of the HS; other needs exist for data in terms of the SITC (and other aggregations). Presently, many countries that use the HS for compilation purposes recompile the data into the SITC for analysis purposes. This need for the SITC is expected to continue in so far as the SITC aggregates and their rearrangements in terms of the classification by Broad Economic Categories (BEC) are the aggregates most appropriate for economic analysis and for incorporation of trade data into national accounts aggregates. The HS provides time-series that go back to 1988. The SITC through its various revisions provides time-series from 1950 to date. There are problems in comparability of some series under the various revisions of the SITC; however, there is still considerable comparability especially at the more aggregated levels of the classification.

18. From the transition period to the time when most countries might compile trade data in terms of the HS, the SITC will remain the only classification to provide a basis for comparability of commodity trade among countries, since trade in terms of the HS and other nationally used classifications can be converted to the (less detailed) SITC but trade in terms of the SITC cannot be converted to the (more detailed) HS. Consequently, the SITC will be unique in its ability to serve the purpose of comparability. Also, for developing countries that do not have the capacity to apply the HS in full detail or for whom application at the level of full detail is not meaningful, the SITC will have a continuing role in compilation and in generation of national economic aggregates.

19. For the above-mentioned reasons, many countries and users are expected to compile trade data in terms of the SITC, and in cases where data are compiled in the HS need will continue for the recompilation of those data in terms of the SITC. The Statistical Division of the Department of Economic and Social Development of the United Nations Secretariat recently sent a questionnaire to national statistical offices; of 66 responses, 51 (77 per cent) indicated that countries considered that the SITC should be continued and at the current level of detail (at least) along with the HS. The United Kingdom of Great Britain and Northern Ireland Department of Trade and Industry, for example, just completed development of its Overseas Trade System (OTS) which includes trade data in terms of both the nine-digit commodity code (HS) and the five-digit section and division levels of the SITC, Rev.3. The Economic Commission for Africa (ECA) recently completed a study (document E/ECA/PSD.7/TP.1, dated 31 October 1991) in respect of African countries, where although the response rate has been low (20 countries) about 55 per cent of the responding countries had indicated that they planned to adopt the HS for reporting their trade-by-commodity statistics, 10 per cent had indicated their plan to adopt the SITC, Rev.3, while 35 per cent had indicated that they had no plans to adopt a new commodity classification. Some of those not contemplating a change would in general continue using the SITC. In addition, several international organizations active in trade analysis have confirmed a continuing need for data in terms of the SITC, at least pending availability of HS data for most countries of the world and development of long-term time-series in terms of the HS. Consequently the SITC should be retained to serve needs of analysis on a continuing basis and of primary compilation on a transitional basis.

(c) Alternatives for the detail and structure of the SITC for the future

20. The following question arises: What, if anything, should be done to the SITC, Rev.3, in the light of revisions to the HS. The Statistical Commission's view that too-frequent changes in statistical classifications are not desirable needs to be kept in mind. However, the need to reflect changing structures of industry and trade is an important one, and revision to the HS provides the mechanism for addressing this need and, potentially, for enabling trade flows to reflect more detail.

21. One possibility is to freeze the SITC, Rev.3, that is, make no change. A new correlation would be developed from the revised HS and incorporated directly in the current SITC, Rev.3. This would provide continuity of SITC Rev.3 series but would not reflect any structural changes in trade. Resource needs would be negligible for development of the correlation.

22. Another possibility is to revise the SITC, Rev.3, at the most detailed level in line with the HS but retain its basic general structure and allow for the introduction of new detailed items corresponding both to new detail introduced into the HS and to essential changes in structure that may be derived from changes in the HS. This approach would also give continuity to the extent that revision to the HS permitted and allowed for reflection of structural changes. Resource needs would be minor for identification of the detail needed, of the correlation and of essential structural changes.

23. A third option (a subset of the second) would be to limit the new revision to the three-digit level, since that is the level that is generally used in economic analysis. Such an approach would provide continuity of series and reflect changes in structure, but would lack detail. In the recent survey conducted by the Statistical Division of the Department of Economic and Social Development of the United Nations Secretariat, countries have generally indicated a need for the same or more detail in the classification. Resource needs would be negligible for this option.

24. A fourth possibility is a major review of the SITC, Rev.3, for structure and detail such as has been done during other revisions of the classification. Resource needs are considerable in terms of staff time and costs of expert group meetings to develop a revised structure.

25. On the basis that the HS would be recommended as the primary classification for compilation of trade statistics, and the SITC continue as a compilation classification during a transition period and as an analytical classification, the second alternative presented above - revising the SITC, Rev.3, at the most detailed level in line with the HS but retaining the basic general structure of the SITC, Rev.3, while adding new detail reflecting changes in the HS and essential changes in structure that may derive from changes in the HS - would be expected to meet needs.

### 2. Classifications to be used for databases in international organizations

26. The question of the ways in which international trade data ought to be maintained by international organizations should be determined by those organizations in consultation with their users. Given the current practice of many countries of reporting in terms of the HS (and if the HS is recommended for compilation at the national level), an HS database should be maintained at the international level within the United Nations, reflecting the national practice. The Statistical Division of the Department of Economic and Social Development of the United Nations Secretariat is establishing such a HS database.

27. While the SITC is used for compilation at the national level and for analytical purposes, data in terms of the SITC should also be maintained at the international level within the United Nations. There is a strong need for data in this form and the need is expected to continue. While users could themselves compile the SITC and other aggregates from HS data, this imposes a burden on them and opens up the possibility of different user approaches to conversion and compilation of aggregates. The demand for SITC data is so broad-based that maintenance of data in the SITC form along with the HS is essential.

28. Questions of the versions of the SITC that should be maintained and the methods of conversion from the HS to the various versions of the SITC should be resolved (taking account of the technical validity of various methods of

conversion and the resources needed for each method) by the compiling organizations in consultation with users.

## III. VIEWS OF THE GENERAL AGREEMENT ON TARIFFS AND TRADE

### A. Historical perspective

29. A retrospective view on the development of international trade classifications could be taken involving a repetition of well-known facts. However, consideration of the tremendous efforts and resources that were dedicated in past decades to the harmonization of divergent classifications might serve to emphasize the importance of the decisions concerning present nomenclatures and to prevent a coming up against the same obstacles to be faced in attempting to link two separate classifications.

30. In the late 1940s, two nomenclatures were developed in parallel, one by the European Customs Union Study Group and the other by the Statistical Commission. The Statistical Commission established the Standard International Trade Classification (SITC), which all Governments were requested to adopt in 1950 for their external trade statistics. 1/ The European Customs Union Study Group established by a convention the Brussels Tariff Nomenclature (BTN), which came into force in 1959. 9/

31. During the development of the two nomenclatures, it became evident that a link between them should be established. At the end of the 1950s, experts from the former Statistical Office of the United Nations Secretariat (now the Statistical Division of the Department of Economic and Social Development of the United Nations Secretariat), the Customs Cooperation Council (CCC) and other organizations (GATT, the Organisation for Economic Cooperation and Development (OECD) and the European Communities) established a concordance between the SITC and the BTN. To ensure the SITC-BTN correlation, the SITC was revised in 1960, and at the same time subheadings were created in the BTN. The link between the two nomenclatures was subsequently maintained by amendment of the BTN in 1965, 1972 and 1978; by a second revision of the SITC in 1974; and by inclusion of additional alphabetical subheadings in the Customs Cooperation Council Nomenclature (CCCN) (previously known as the BTN, which was renamed in 1974).

32. In the early 1970s, CCC examined the possibility of developing the Harmonized Commodity Description and Coding System (HS) which could answer the needs of all users of international trade data in the areas of customs, statistics and transport. The preparation of the HS was finalized in 1981, resulting in the extension of the 1,011 four-digit CCCN headings to the 5,019 six-digit classes of the HS. 3/ In 1981, the former Statistical Office of the United Nations Secretariat began elaborating a revision of the SITC, Rev.2, in order to keep it in line with the HS. Later on, concordances were also established with the ISIC and the provisional CPC. 1/, 5/ In its resolution 1985/7 of 28 May 1985, the Economic and Social Council recommended that Member States should report internationally data on external trade statistics, as far

and as soon as possible, according to the SITC, Rev.3, which extended the 1,924 basic items of the SITC, Rev.2, to 3,118 basic items. 4/

33. In 1983 the HS Convention was approved by CCC and opened for signature. 3/ The HS came into force in 1988 and as of 1992 more than 100 countries have a customs tariff based on the HS nomenclature.

34. The reasons for developing separate classifications for customs purposes and for economic analysis purposes are derived from the divergent needs of customs authorities and statisticians. In customs tariffs, articles are usually grouped according to the material of which they are made (horizontal classification). For economic statistics, goods are usually grouped by broad economic classes (such classes include food, crude materials and chemicals) and also by stage of fabrication (vertical classification) and industrial sector.

35. The HS nomenclature is basically a horizontal classification. However, some of the 21 Sections of the HS, which regroup HS Chapters, offer a classification of products not only by their chief component material but also by stage of fabrication and end-use. For example in Section X, Chapter 47 covers wood pulp and paper waste; Chapter 48, paper and articles of paper; and Chapter 49, products of the printing industry. Within each Chapter, the stages of fabrication are identified at the four-digit or six-digit level (for example, in Chapter 3, heading 0301 covers live fish; 0302, fish fresh or chilled; and 0303, frozen fish). Therefore, the HS attempts to take into consideration customs and statistical needs.

## B. Present situation

36. In evaluating the present situation, the following points are addressed: (a) current reporting practices and coverage under the SITC, (b) historical continuity under the SITC and (c) historical continuity under the HS.

### 1. Current reporting practices and coverage under the SITC

37. In its resolution 1985/7 of 28 May 1985, the Economic and Social Council recommended that Member States should report internationally data on external trade statistics according to the SITC, Rev.3, and requested the Secretary-General to arrange that, beginning not later than with data for the full year 1988, the publication of SITC data by United Nations bodies should be, as far as possible, in the form of SITC, Revision 3.

38. However, not all countries or areas report to the Statistical Division of the Department of Economic and Social Development of the United Nations Secretariat as required, irrespective of the SITC revision used, nor do they report necessarily in a timely manner. For example, as of 12 September 1991, the Compressed International Trade Database (COMTRADE) contained, from a potential of 208 geographical areas, 187 for 1988, 65 for 1989 and 39 for

1990. Of the 187 areas for 1988, trade had been estimated for 109 and were available through COMTRADE software. 10/ The number of countries or areas for which data were given in the SITC, Rev.3, was respectively 37 for 1988, 41 for 1989 and 36 for 1990. Those numbers are bound to increase during the coming years as more and more countries implement the HS.

39. Currently, the Statistical Division of the Department of Economic and Social Development of the United Nations Secretariat receives data in any of the following trade nomenclatures: HS; CCCN; SITC, Rev.3; SITC, Rev.2; and SITC, Rev.1; as well as other national classifications. Data received in the HS or the CCCN are converted to the SITC, Rev.3, before being stored in the COMTRADE database. Thereafter, for historical continuity purposes, those data are further converted to the SITC, Rev.2, and to the SITC, Rev.1. Whereas the conversion to the SITC, Rev.3, from the HS is straightforward, the concordance to the SITC, Rev.2, introduces many approximations that make the comparability over time partly unreliable, and more so when the concordance to Rev.1 takes place. This issue is discussed further under subsection 2 below.

40. It is important to note that country coverage in the SITC over the years has been far from complete and reliable for the following principal reasons: (a) as indicated earlier, not all countries report to the Statistical Division of the Department of Economic and Social Development of the United Nations Secretariat; (b) many countries do not supply data for every year and if they do, a substantial time-lag is sometimes involved; and (c) many countries report data at an aggregated level because they either report under the CCCN or have yet to implement the HS or the SITC, Rev.3, or for reasons of security or confidentiality. Furthermore, the different interpretations in the classification of products by individual country add to the overall difficulty in comparing trade data of countries over time at the product level.

41. Table 1 below summarizes data availability in COMTRADE or using the COMTRADE software for the period 1962-1990. The purpose of this table is to give an overview of the coverage of the COMTRADE database with respect to number of countries and number of years for both exports and imports, and level of product disaggregation.

42. Of the potential number of units of observation available through COMTRADE, less than half were nationally reported data. Furthermore, although 84 per cent of the available units of observation were available at the lowest disaggregation level (five-digit), it has been calculated that 134 countries reported at least one break in their time-series with respect to the level of disaggregation.

Table 1. Report of COMTRADE availability (as of 12 September 1991) for the period 1962-1990

| | Total number | Distribution as percentage of total number of: Potential areas/ years/directions | Distribution as percentage of total number of: Areas/years/ directions available in COMTRADE |
|---|---|---|---|
| Geographical areas | 218 | | |
| Potential areas covered by COMTRADE | 208 | | |
| Years | 29 | | |
| Potential areas/years/directions | 12 644 | 100 | |
| Potential areas/years/directions covered by COMTRADE | 12 064 | 95 | |
| Areas/years/directions available in COMTRADE | 8 730 | 69 | 100 |
| Nationally reported data | 5 843 | 46 | 67 |
| Estimated data | 2 887 | 23 | 33 |
| At five-digit level | 7 369 | | 84 |
| At four-digit level | 1 238 | | 14 |
| At three-digit level | 91 | | 1 |
| At two-digit level | 32 | | 1 |
| At one-digit level | 0 | | 0 |

## 2. Historical continuity under the SITC

43. The first and most obvious problem connected with historical continuity is that as a classification becomes more detailed over time to accommodate changing user needs, continuity can only be secured at the level of detail of the original classification, that is, the SITC, Rev.1, for the period covered by COMTRADE, namely, 1962 to date, and the SITC, Rev.2, for the period 1976 to date. Thus, data received in the HS by the Statistical Division of the Department of Economic and Social Development of the United Nations Secretariat undergo three conversion steps in order to define HS categories in terms of SITC, Rev.1 positions.

44. Another issue that affects historical continuity under the SITC is that of confidentiality. Each successive revision of the SITC was meant, in part, to provide a more detailed breakdown in commodities. However, some countries, for reasons of confidentiality, do not necessarily report at the more detailed commodity level. Also, countries may use a detailed classification system that is not fully correlated with the SITC. Such practice has to some extent nullified the original intention to provide users with more detailed data and thereby created the need for (United Nations) special codes. These artificial

codes, which are not listed in the SITC, are designed to accommodate reporting by countries of commodities deemed to be confidential, or reporting in a way different from that of the SITC at a given level but classifiable within a broader SITC category.

(a) SITC, Rev.3/SITC, Rev.2 historical continuity

45. The SITC, Rev.3, has been defined in terms of the HS and the link between the two nomenclatures is therefore straightforward, except in the case of petroleum (for which the SITC, Rev.3, provides more detail than the HS at the present time). On the other hand, because the SITC, Rev.3, is based on the HS, its comparability with the SITC, Rev.2, has to a large extent been sacrificed. A very large number of SITC, Rev.3, items have now to be arbitrarily allocated to different SITC, Rev.2, positions. Those SITC, Rev.2 items are prefixed by an "ex" meaning, in the United Nations Standard International Trade Classification, Revision 3, "part of" (the SITC, Rev.2 item). 3/

46. The number of SITC, Rev.3 items having to be allocated to SITC, Rev.2 "ex" positions decreases if products are aggregated at higher levels. A concordance between SITC, Rev.3, and SITC, Rev.2, at the division level (two-digit) has been elaborated and quantified for a number of developed countries. 11/ Looking at the number of adjustments and at the number of "ex" positions (at the four- and five-digit levels) that cannot be allocated, most of the "ex" positions, as might have been expected, are found in manufactured goods. Among these are plastics in primary form, with 56 unallocated "ex" positions; paper, paperboard and articles thereof, with 57; prefabricated buildings, sanitary, plumbing, heating and lighting fixtures and fittings, not elsewhere specified or included (n.e.s.), with 75; travel goods, with 40; and miscellaneous manufactured articles, n.e.s., with 74. Primary commodities have been less affected by the revisions as evidenced by a lower number of "ex" positions, with the exception of the entries in the division on animal and vegetable fats and oils, with 32 "ex" positions.

47. Out of the 67 divisions of the SITC, Rev.3, 13 have a direct allocation to the SITC, Rev.2, and for 4 others the comparability is maintained after conversion to the SITC, Rev.2. This means that a clear-cut correspondence can be established for 17 divisions only. In terms of value those 17 divisions covered 20 per cent of the total imports and 15 per cent of the total exports in 1989 of the developed countries mentioned above.

48. The number of "ex" positions that cannot be allocated does not mean that the trade data are not comparable in the SITC, Rev.3, and the SITC, Rev.2, for each of the 50 other divisions. In fact, a large proportion of trade flows remain comparable at the division level. The number of divisions, from a total of 67, for which data are strictly comparable (zero per cent deviation) in the SITC, Rev.3 and the SITC, Rev.2, varies from 35 in the case of imports of Japan and Italy to 43 in the case of imports of Belgium and Canada. When adding divisions with less than 5 per cent discrepancy, the number of divisions ranges between 56 and 64. The trade coverage of those divisions

with zero or less than 5 per cent discrepancy represented between 85 and 99 per cent of the total trade value of the developed countries considered.

49. At this point, it is important to note how the historical series are created. If data are received in the SITC, Rev.2, then no data are available in the SITC, Rev.3 in the COMTRADE database. If data are received in the SITC, Rev.1, then no data are available in the SITC, Rev.2 or the SITC, Rev.3 database.

50. As stated earlier, the conversion from the HS to the SITC, Rev.3, is unequivocal and does not imply approximations (except for petroleum). The other conversions - from the CCCN to the SITC, Rev.3, or from the SITC, Rev.3, to the SITC, Rev.2 or the SITC, Rev.1 - imply subdivisions of source items to match two or more target items. To this end, the Statistical Division of the Department of Economic and Social Development of the United Nations Secretariat created standard conversions tables that are used to convert data in the same manner for all countries. For source items that have to be subdivided to match several target items, the conversion tables do not subdivide the trade value but allocate the total trade value of the source item to one of the target items. The following example illustrates the practice:

Allocation from one source item to one of several target items

| Source item, SITC, Rev.2 | Target items, SITC, Rev.1 |
|---|---|
| 6712 Pig iron and spiegeleisen | 6712 Pig iron (Note: includes 6711) |
| | 6711 Spiegeleisen |

51. The target item selected for allocating trade is determined according to the product descriptions of the source and target items, with the preference being given to the target item offering the fullest continuity at the level of item, subgroup, group, and so on. A footnote is attached to the target item receiving the total trade value (SITC, Rev.1 subgroup 6712 in the example above) from a subdivided source item (SITC, Rev.2 subgroup 6712) to indicate the other target item or items whose trade value (SITC, Rev.1 subgroup 6711) is regrouped under the target item selected.

52. Therefore, no matter how good the above indicators are, they need to be interpreted with caution. First, and despite the overall similarity between the figures referred to above, the relationship between the number of "ex" positions and the magnitude of the discrepancy is not always evident, nor is the relationship between the magnitude of the discrepancy and the value of trade involved. For many divisions for which there is no one-to-one correspondence between the SITC, Rev.3, and the SITC, Rev.2, trade values are nevertheless identical.

53. The reason could be that the value of trade for the "ex" items that could not be allocated directly is either nil or less than half the unit shown or that all trade is allocated to the predominant "ex" item. Furthermore, with the exception of divisions 57 and 58 in the SITC, Rev.3, the divisions most affected vary from country to country. Finally, owing to differences in the commodity structure of trade, it is probably not advisable to so generalize the above conclusions as to make them apply to countries at a lower stage of economic development.

54. Thus far, the issue of historical continuity has been addressed at the divisional level only, that is, the two-digit level, and as it concerns the SITC, Rev.3, and SITC, Rev.2.

(b) SITC, Rev.2/SITC, Rev.1 historical continuity

55. Comparing data in the SITC, Rev.2, and the SITC, Rev.1, for the same developed countries mentioned earlier, the number of divisions for which the trade value is strictly comparable (zero per cent deviation) varies between 44 and 50. When adding divisions with less than 5 per cent discrepancy, the number of divisions ranges between 59 and 65 from a total of 69 divisions (groups 911, 931, 941, 951, 961 and 971 being considered divisions). The trade coverage of those divisions with zero or less than 5 per cent discrepancy varies between 81 and 97 per cent of total trade value.

(c) SITC, Rev.3/SITC, Rev.1 historical continuity

56. As might be expected in going from the SITC, Rev.3 to the SITC, Rev.1, a further deterioration takes place in the number of divisions for which the trade value is strictly comparable or with a discrepancy of less than 5 per cent, and the trade coverage of those divisions is reduced as well, to between 64 and 92 per cent. This results from the SITC, Rev.3/SITC, Rev.2 discrepancies that are carried over and further amplified by those stemming from the Rev.2/Rev.1 discrepancies. The trade coverage of these divisions deteriorates faster than the number of divisions mainly because divisions 57 and 58 in the SITC, Rev.3, cannot be reconstructed using the SITC, Rev.1 nomenclature, whereas trade covered by these two divisions represents between 1 and 5 1/2 per cent of the selected countries' total trade flows.

## 3. Historical continuity under the HS

57. The construction of trade statistics in such detail (based on HS six-digit codes) as is provided by the SITC, Rev.2, and the SITC, Rev.1, is not possible without a number of approximations, even if such statistics are constructed for SITC sections only. Table 2 below summarizes the extent of those approximations, which are unavoidable when the HS six-digit positions are allocated to sections, divisions and groups of the SITC, Rev.2, and the SITC, Rev.1.

58. As shown in table 2, when HS positions are allocated to the SITC, Rev.2, 427 items (9 per cent of all HS positions) need to be allocated arbitrarily to two or three SITC, Rev.2 sections; 686 items (14 per cent), to two or more SITC, Rev.2 divisions; and 1,183 items (24 per cent), to two or more SITC, Rev.2 groups. When HS positions are allocated to the SITC, Rev.1, the situation is a slightly better one, since only 301 items (6 per cent of all HS six-digit positions) need to be allocated arbitrarily to two or three SITC, Rev.1 sections; 426 items (8 per cent), to two or more SITC, Rev.1 divisions; and 917 items (18 per cent), to two or more SITC, Rev.1 groups.

Table 2. Allocation of six-digit HS positions between two or more SITC positions

| | Number of six-digit HS positions | | | | | |
|---|---|---|---|---|---|---|
| | SITC, Rev.2 | | | SITC, Rev.1 | | |
| | Section | Division | Group | Section | Division | Group |
| One-to-one or many-to-one correspondence | 4 592 | 4 333 | 3 836 | 4 718 | 4 593 | 4 102 |
| Split in two or further | 427 | 686 | 1 183 | 301 | 426 | 917 |
| Split between | | | | | | |
| Two SITC positions | 409 | 582 | 836 | 286 | 367 | 722 |
| Three SITC positions | 18 | 67 | 202 | 15 | 34 | 128 |
| Four SITC positions | 0 | 15 | 88 | 0 | 9 | 43 |
| Five SITC positions | 0 | 7 | 24 | 0 | 10 | 8 |
| Six SITC positions | 0 | 10 | 13 | 0 | 3 | 8 |
| Seven SITC positions | 0 | 2 | 5 | 0 | 0 | 1 |
| Eight SITC positions | 0 | 0 | 8 | 0 | 2 | 2 |
| Nine SITC positions | 0 | 2 | 5 | 0 | 0 | 4 |
| Ten SITC positions | 0 | 0 | 1 | 0 | 0 | 0 |
| Eleven SITC positions | 0 | 1 | 0 | 0 | 1 | 0 |
| Twelve SITC positions | 0 | 0 | 1 | 0 | 0 | 1 |

59. Following the 1 January 1992 amendments to the HS, the Statistical Division of the Department of Economic and Social Development of the United Nations Secretariat has modified the SITC, Rev.3, to keep it in line with the revised HS. The 1992 HS amendments marginally affect the SITC. For five SITC, Rev.3 subgroups a change in coverage occurs but the SITC number remains the same. For three of them, the correlation with the SITC, Rev.2, is affected while for the other two SITC, Rev.3 subgroups, it is not. All other changes are editorial in nature or consist of clarifications of contents.

## C. Future orientation

60. Three courses of action for consideration by the Statistical Commission are identified and explored below. The first would be to continue with the current approach of revising the SITC, Rev.3, as often as, and in line with revisions to, the Harmonized Commodity Description and Coding System. A second course of action would be not to revise the SITC, Rev.3, as frequently as the HS in order to preserve the existing historical continuity in the trade series. The third option would be to drop the SITC, Rev.3, in future and to adopt the Harmonized System for the statistical purposes for which it was intended in part in the first place.

61. These courses of action are addressed in the following context:

(a) Historical continuity that exists at present among the different revisions of the SITC, and the foreseeable changes to the HS;

(b) Coverage of the SITC and the HS in terms of countries' supplying timely and complete data;

(c) Availability of historical time-series compiled on the SITC and the HS;

(d) Relationship of the SITC and the HS to other economic classifications;

(e) User needs in terms of economic analysis and market research;

(f) Relative benefits of the SITC, Rev.3, and the HS for various purposes such as initial data collection and classification;

(g) Resource requirements dedicated to maintaining the SITC and the HS.

### 1. Historical continuity

62. For the developed countries examined, a zero per cent deviation between the SITC, Rev.3, and the SITC, Rev.1, exists for less than 50 per cent of the divisions and for less than 40 per cent of their trade value. Adding the divisions where there is less than 5 per cent discrepancy, that is, where the same groups of products can continue to be more or less identified separately over time, the percentages are approximately 80 per cent for both divisions and their trade value. Those (two-digit) divisions cover mainly primary products. The 1992 revision to the SITC as well as the proposed revision to the HS planned for 1996 have not been taken into consideration. What this implies is that the quality of the time-series at the aggregate level and certainly at the more detailed level will continue to deteriorate.

63. The HS however, is not without its problems. One of the functions of the Harmonized System Committee established under the HS Convention is "to propose such amendments as may be considered desirable, having regard, in particular, to the needs of users and to changes in technology or in patterns of international trade". 3/ Although many of the changes introduced on 1 January 1992 were of a purely formal character, some of the amendments are already affecting the product contents of Chapters, four-digit Headings and six-digit Categories. Those substantive changes will affect the continuity of 47 six-digit positions. Furthermore, in some instances the product contents of six-digit positions change but not the six-digit number. It will therefore be necessary to design a system to identify the changes over time of the affected six-digit positions. A typical example of the problem is provided by the amendments to heading 1519:

| | | | |
|---|---|---|---|
| 1519.1 | Other industrial monocarboxylic fatty acids | 1519.1 | Other industrial monocarboxylic fatty acids; acid oils from refining |
| 1519.19 | Other | 1519.19 | Other (including acid oils from refining) |
| 1519.20 | Acid oils from refining | 1519.20 | Industrial fatty alcohols |
| 1519.30 | Industrial fatty alcohols | | Six-digit category deleted |

64. In the above example, a user attempting to retrieve industrial fatty alcohols from a database for the years 1988-1992 will have to specify:

(a) Years 1988-1991, HS number 1519.30;

(b) Year 1992, HS number 1519.20.

65. It is foreseen that a second set of amendments to the HS is to come into force in 1996. It is too early at this stage to identify the amendments to the HS nomenclature that will be recommended by the HS Review Subcommittee of the Customs Cooperation Council for implementation as of 1 January 1996 (see para. 12 above). The HS Review Subcommittee has already examined proposals of amendments in the following sectors: minerals and chemicals (HS Chapters 25-40), textiles and clothing (HS Chapters 50-63), metals (HS Chapters 72-83), machinery and electronics (HS Chapters 84 and 85) and optical, photographic and measuring instruments (HS Chapter 90). Those amendments concern explanatory notes as well as renumbering of HS six-digit positions. Proposals for amendments, as of today, imply changes in the contents of HS positions without changing the six-digit number; others imply subdivisions of existing six-digit positions into new six-digit numbers. In some cases the changes affect the continuity of four-digit headings. The HS Review Subcommittee will examine the remaining HS Chapters at its

September 1992 and January 1993 sessions and a recommendation will be submitted to the Customs Cooperation Council at its June 1993 session.

66. Coupled with the problem of historical continuity is that of comparability across countries and over time. To construct a time-series, products reported by individual countries need to be first allocated to categories of the SITC, from Revision 3 to Revision 2, and from Revision 2 to Revision 1. At present, this allocation process is done systematically by the staff of the Statistical Division of the Department of Economic and Social Development of the United Nations Secretariat. However, it is practically impossible to ensure consistency across countries and over time. In fact, thousands of pages of documentation including footnotes, procedures and decisions have been accumulated over the last 30 years. A similar problem will be faced in the implementation of the HS. In this regard, however, legal rules of interpretation have been developed for the HS and a very elaborate set of classification opinions are continually being updated, expanded and circulated to assist in the interpretation and classification of products. In addition, an HS commodity database is being developed that will index to a specific six-digit category potentially all products traded internationally. However, the issues of historical continuity and of comparability across countries are further complicated by article 4 of the HS Convention which allows partial application by developing countries. Although developing countries are strongly encouraged to apply the full six-digit HS within five years of signing the Convention, further delays are possible.

## 2. Coverage

67. The SITC is intended to cover all countries and geographical areas reporting separately. However, not all countries report to the Statistical Division of the Department of Economic and Social Development of the United Nations Secretariat as required, nor do they necessarily report at the same level of detail or on a timely basis. As noted earlier, as of 12 September 1991, the COMTRADE database, from a potential total of 208 geographical areas, contained 39 countries for 1990 (of which 35 reported on the SITC, Rev.3, and 4 countries on the SITC, Rev.2), 65 countries for 1989 and 187 countries for 1988. Of the 187 countries for 1988, 109, or 58 per cent, represented estimates, that is, data not reported, or data supplied by countries that were incomplete. Most of the countries that do report however, do so at the most detailed level of the SITC. At this time, the country coverage of the HS is not as exhaustive as that of the SITC, although the potential exists. Thus far, over 100 countries have adopted the HS, representing over 90 per cent of world trade. Furthermore, article 3 of the HS Convention states that implementation of the HS is compulsory at the six-digit level. Dissemination of data is also expected at the six-digit level, except for cases involving reasons of national security and commercial confidentiality of data.

### 3. Historical time-series

68. It is true that users of historical data compiled on the SITC have at their disposal a time-series dating back 30 years; however, as indicated earlier, the quality of the data over time is suspect especially at the more detailed level. The HS can be directly concorded to the SITC, Rev.3, except in the case of petroleum (a more detailed breakdown is planned for 1996). If adopted in the future to meet statistical needs of users, the HS would offer the availability of the same historical time-series. More important, as demonstrated in table 2 above, a better concordance exists between the HS and the SITC, Rev.2, as well as between the HS and the SITC, Rev.1, than in the linking of the SITC, Rev.3, to Rev.2 and of the SITC, Rev.2 to Rev.1. At the group level of the SITC, Rev.2, 76 per cent of HS six-digit positions are in one-to-one correspondence. For the SITC, Rev.1, the corresponding figure is 82 per cent. At the SITC, Rev.2 and Rev.1 division levels, the percentages for the HS are even higher, 86 per cent and 91 per cent respectively, compared with figures of less than 50 per cent connected with the linking of the SITC, Rev.3, to Rev.2 and to Rev.1.

69. Since both the SITC, Rev.3, and the HS were implemented at the same time in many countries (that is, 1988) and many countries are now reporting to the Statistical Division of the Department of Economic and Social Development of the United Nations Secretariat under the HS nomenclature, it is clear that it would be more advantageous to link the reported HS data directly both to the SITC, Rev.2, and to the SITC, Rev.1, to maintain the existing historical time-series.

### 4. Commodity classifications

70. Over the years, a number of commodity classifications have been developed by international organizations. These, to name a few, include:

(a) The Provisional Central Product Classification (CPC), covering transactions/sales in goods and services; 5/

(b) The Standard International Trade Classification, Rev.3, covering all merchandise entering international trade; 1/

(c) The Classification by Broad Economic Categories, covering all merchandise entering international trade; 12/

(d) The Classification of Commodities by Industrial Origin, covering goods produced by mining and manufacturing industries; 13/

(e) The Commodity Classification (MTC) for Maritime Transport Statistics, covering seaborne merchandise; 14/

(f) The Common Nomenclature of Industrial Products (NIPRO), covering transactions in transportable goods; 15/

(g) A production classification of goods and services according to the General Industrial Classification of Economic Activities within the European Communities (NACE) structure (NACEPRO), covering transactions in goods and services; 16/

(h) The nomenclature of goods for the external trade statistics of the community and statistics of trade between Member States (NIMEXE), covering transactions in transportable goods; 17/

(i) The Combined Nomenclature (CN), covering transactions in transportable goods; 18/

(j) The Standard Goods Nomenclature for Transport Statistics, Revised (NSTR), covering transactions in transportable goods; 19/

(k) The Central Product Classification for Use in the European Communities (CPC-COM), covering transactions/sales in goods and services; 20/

(l) The Harmonized Commodity Description and Coding System (HS), covering transactions in transportable goods; 3/

(m) The Customs Cooperation Council Nomenclature (CCCN), covering transactions in transportable goods; 21/

(n) The Standard Foreign Trade Classification (SFTC), covering transactions in transportable goods; 22/

(o) The Commodity Classification for Transport Statistics in Europe (ECE), covering transactions in transportable goods. 23/

71. Although the following two classifications are referred to as industrial classifications, their output is closely associated with that taking place in international trade. They are:

(a) The International Standard Industrial Classification of All Economic Activities (ISIC), Third Revision; 4/

(b) The General Industrial Classification of Economic Activities within the European Communities (NACE), revised. 6/

72. The international community has witnessed over the years a growing effort to establish concordances among the above commodity classifications. For instance the ISIC Rev.3 has been concorded to the provisional CPC, the SITC Rev.3 and the HS; and the provisional CPC uses the SITC, Rev.3 and the HS as building blocks. The same can be said for the BEC, NIPRO, NACE, NIMEXE, NACEPRO, CN and CPC-COM.

73. However, we have not seen (as we have for commodity classifications) the proliferation of economic classifications in the area of industrial activities. That is, the different groupings of industries for economic

analysis purposes have not resulted in the creation of new industrial classifications.

74. With the advent of the HS, which was developed to meet the needs of all users of international trade in the areas of customs, statistics and transport, one should reflect on the usefulness of the different commodity classifications listed above. For example, GATT could argue the need to create its own commodity classification derived from the HS, but available at a more detailed level.

75. Once national Governments and international organizations have ready access to an international trade database constructed on the HS six-digit arrangement, aggregates of commodities should not lead to the creation of new nomenclatures but rather the commodities should be aggregated from the basic source - the HS - to ensure consistency of information at both the micro and macro levels. This approach also has the advantage that data can easily be presented according to the different needs of users while comparability is ensured.

76. What might be considered is to go one step further and refer to a system of economic classifications rather than to a number of separate but related classifications. This system of economic classifications would regroup industrial activities (that is, the ISIC), goods and services (that is, the provisional CPC), and goods traded internationally (that is, the HS). Since these classifications have already been linked and cover the whole range of economic activity, they constitute an integrated whole. In addition, this would reinforce the work of the Statistical Commission in its endeavour to harmonize economic classifications.

## 5. User needs

77. The introduction to the SITC, Rev.3, states that "for economic analysis it is necessary that aggregates be available for classes of goods such as food, raw materials, chemicals, machinery and transport equipment and also for groupings of commodities by stage of fabrication and by industrial origin". 24/ Since there exists a one-to-one and/or many-to-one relationships between the HS and the SITC Rev.3 positions, any product groups developed using the SITC, Rev.3 for purposes of market analyses and general economic analyses can also be constructed directly from the HS. The SITC, Rev.3, was developed, as stated earlier, to bring a certain standardization to the product groups to be used for economic analysis. Unfortunately, users at large often regroup products to fit their own specific needs, so that over time comparability breaks down. What remains however, is the basic source of products from which those groups were first derived - the HS.

78. In other words, economists as well as statisticians could as easily use the HS to construct the product groups that they require for analytical purposes, without having to label such groupings of products (whether derived on the basis of stage of fabrication, chief component material, production

processes, materials used or industrial origin) as different commodity classifications (for example, the SITC, BEC, classification of commodities by industrial origin, SFTC, MTC and NIPRO). Furthermore, economic analysis at an aggregative level of commodities for the current period can also be done using the provisional Central Product Classification.

## 6. Benefits of the SITC, Rev.3, and the HS

79. Thus far, the present report has shown that maintaining both the SITC, Rev.3, and the HS may not be a practical option in the future, especially if the SITC, Rev.3, is to continue to be revised in line with changes to the HS.

80. At present, many of the countries reporting to the Statistical Division of the Department of Economic and Social Development of the United Nations Secretariat do so on an HS basis. The conversion to the SITC, Rev.3, is done by the Statistical Division. As for the countries currently collecting their trade data on the basis of the CCCN, many of them are expected to convert to the HS in the future. As to the countries collecting and reporting their trade data to the Statistical Division of the Department of Economic and Social Development of the United Nations Secretariat on the SITC, their number is few at present and expected to decrease in future.

81. Furthermore, work is under way at the Statistical Division of the Department of Economic and Social Development of the United Nations Secretariat to develop a database on HS. Adopting the HS as the only official commodity classification for international trade purposes should lessen the workload. To maintain the existing SITC historical time-series, the HS would be concorded directly both to the SITC, Rev.2, and to the SITC, Rev.1, and this approach has been demonstrated to provide a better fit than that through the SITC, Rev.3. Improvement in the historical continuity of HS data can also be expected if a more rigorous approach to the splitting of classes and to the HS numbering system is adopted. In this regard, statisticians have a vital role to play. They should be much more involved in the work of the Harmonized System Committee and participate actively at the meetings of the HS Review Subcommittee to ensure that future revisions to the HS will not deteriorate its relationship with other international classifications. It must be remembered that the HS was developed in the first instance to meet the needs of all users of international trade data, including those in the area of statistics.

## 7. Resource requirements

82. Maintaining and disseminating in future only one official commodity trade classification instead of two will not only minimize the need for resources but should also improve the comparability of the resulting data as more countries report to the Statistical Division of the Department of Economic and Social Development of the United Nations Secretariat on an HS basis.

## D. Conclusions

83. The historical continuity of the SITC through Revisions 1, 2 and 3 has been examined. The situation has deteriorated with the revisions to the HS for 1992 and will further deteriorate once the 1996 revisions planned for HS are incorporated into the SITC, Rev.3.

84. At present, many of the countries that have adopted the HS report to the Statistical Division of the Department of Economic and Social Development of the United Nations Secretariat on the basis of this nomenclature. Their data are then converted to the SITC by a series of concordances from Rev.3 to Rev.2, and from Rev.2 to Rev.1.

85. In view of the present situation, some of the fundamental reasons for introducing the SITC, Rev.3, must be re-examined. It was observed at the time of the third revision to the SITC that there should be a direct link between the HS and the SITC. Furthermore, it was argued that a separate commodity classification was required for economic analysis to provide aggregates for classes of goods such as food, raw materials, chemicals, machinery and transport equipment and also groupings of commodities by stage of fabrication and by industrial origin. Another concern at the time of the latest revision to the SITC was the need for continuity with the previous versions. Continuity is now seriously in question with the impending revisions to HS and the intention to continue a direct concordance between the SITC, Rev.3, and the HS.

86. In addition, one of the arguments put forward for maintaining the SITC, Rev.3, is that it is one of the few commodity classifications that offer the possibility of historical time-series. This report has shown that a switch to HS does not eliminate such a historical time-series but rather improves it, since the HS provides a better direct concordance to the SITC, Rev.2, and to the SITC, Rev.1, than does the SITC, Rev.3. In other words, one can more easily work back a time-series from the HS without having to maintain the SITC, Rev.3.

87. Therefore, the Statistical Commission may wish to consider the future of the SITC, Rev.3, in terms of:

(a) Continuing to revise the SITC, Rev.3, in line with revisions to the HS. This approach will further deteriorate the existing historical continuity unless, of course, future revisions to the HS are more rigorous from the point of view of the allocation of new classes or the splitting of existing ones, and their numbering;

(b) Not revising the SITC, Rev.3, as frequently as planned in order to maintain the integrity of the remaining series. This option will not improve the current situation but will maintain to the extent possible the quality of the existing historical time-series;

(c) Dropping the SITC, Rev.3, in future in favour of the HS as more countries adopt the latter. As shown, this would not disrupt the historical time-series under the SITC but would improve it. Furthermore, economic analysis at an aggregative level of commodities can continue for the current period using the HS and the provisional Central Product Classification. The resources made available by not having to maintain and disseminate data under two classifications could be used to further improve the quality of HS data reported to the Statistical Division of the Department of Economic and Social Development of the United Nations Secretariat and the linkages from the HS to the SITC, Rev.2, and to the SITC, Rev.1.

## Notes

1/ See Standard International Trade Classification, Revision 3, Statistical Papers, Series M, No. 34/Rev.3 (United Nations publication, Sales No. E.86.XVII.12), p. v.

2/ Commodity Indexes for the Standard International Trade Classification, Revision 2, Statistical Papers, Series M, No. 38/Rev., vols. I and II (United Nations publications, Sales Nos. E.81.XVII.3 and E.81.XVII.4). Commodity indexes for the Standard International Trade Classification, Revision 3, forthcoming.

3/ See The Harmonized Commodity Description and Coding System (Brussels, Customs Cooperation Council, 1989).

4/ See International Standard Industrial Classification of All Economic Activities, Third Revision, Statistical Papers, Series M, No. 4, Rev.3 (United Nations publication, Sales No. 90.XVII.II).

5/ See Provisional Central Product Classification, Statistical Papers, Series M, No. 77 (United Nations publication, Sales No. 91.XVII.7).

6/ Statistical Office of the European Communities, Luxembourg, 1991.

7/ All published by the Customs Cooperation Council, Brussels.

8/ Official Records of the Economic and Social Council, 1991, Supplement No. 5 (E/1991/25), para. 164.

9/ Nomenclature for the Classification of Goods in Customs Tariffs (Brussels, Customs Cooperation Council, 1955).

10/ This commonly represents estimated data and data supplied by countries but with incomplete commodity or partner information.

11/ These include Belgium-Luxembourg, Canada, France, Germany, Italy, Japan, the Netherlands, the United Kingdom of Great Britain and Northern Ireland and the United States of America.

Notes (continued)

12/ Classification by Broad Economic Categories, Defined in terms of SITC, Rev.3, Statistical Papers, Series M, No. 53, Rev.3 (United Nations publication, Sales No. E.89.XVII.4).

13/ Classification of Commodities by Industrial Origin, Statistical Papers, Series M, No. 43 (United Nations publication, Sales No. E.66.XVII.7).

14/ See 1986 International Sea-borne Trade Statistics Yearbook, (Maritime Transport), Statistical Papers, Series D, vol. XXXIII-XXXVI, No. 2 (United Nations publication, Sales No. E.88.XVII.13).

15/ Statistical Office of the European Communities, 1975.

16/ Ibid., 1991.

17/ Ibid., 1982.

18/ Ibid., 1987.

19/ Ibid.

20/ Ibid., 1991.

21/ Customs Cooperation Council, 1972.

22/ (Former) Council for Mutual Economic Assistance.

23/ Economic Commission for Europe.

24/ Standard International Trade Classification, Revision 3, p. vi.

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